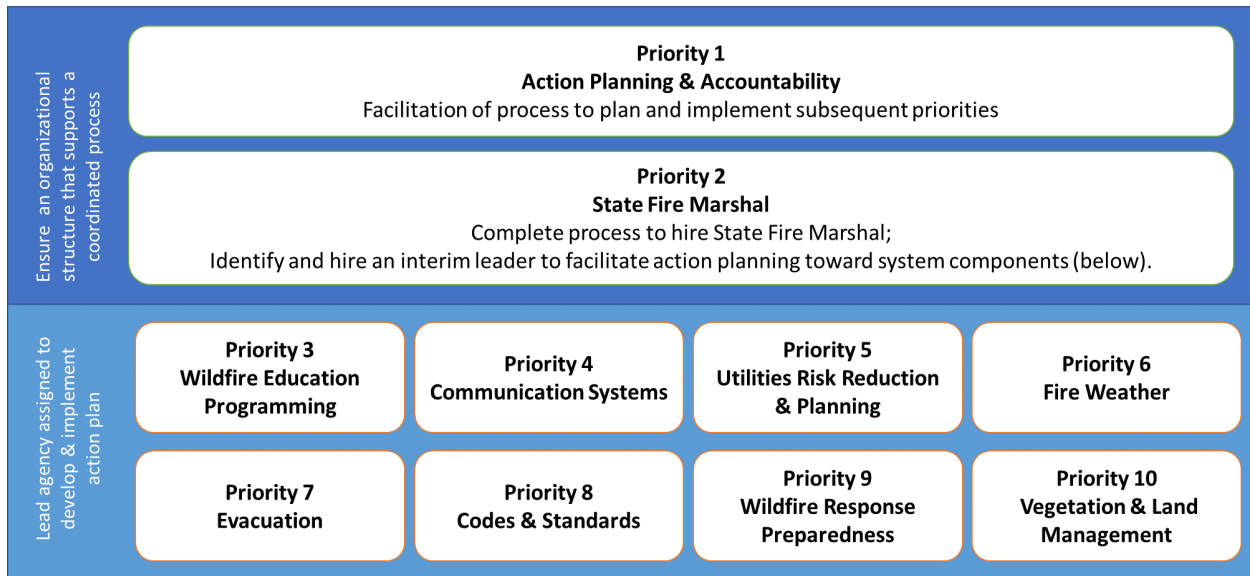




## **10 Highest Priorities for Enhancing Wildfire Readiness in Hawai'i: Key Actions from the Lahaina Fire Incident Analysis Report (Phase Two) Includes Recommendations "How" to Address each Priority**

The Lahaina Fire Incident Analysis Report (Phase Two) was released on September 13, 2024. In a briefing, Governor Green asked FSRI to identify the ten key priorities for the State of Hawai'i to address to enhance wildfire safety statewide. By distilling the report's 184 recommendations into these ten areas of focus the State can create an immediately actionable plan concentrated on the most urgent and impactful areas. This streamlined approach provides a clear roadmap for the State to initiate progress and take the critical first steps necessary to establish a solid foundation that supports future meaningful improvements. While these ten priorities are crucial for immediate action, the remaining recommendations are also vital and should be urgently addressed to ensure comprehensive wildfire system improvement across the state.

This document includes recommendations for "How" to address each priority. These recommendations are limited by FSRI's understanding of the State of Hawai'i's organizational structures but bolstered by FSRI's experience within each of the priority areas. We realize there may be different approaches that better align with state, county and non-profit organizational processes.



**Priority 1. Action Planning and Accountability.** Require Department of Land and Natural Resources Division of Forestry and Wildlife (DLNR-DOFAW), Hawai'i Building Code Council (HBCC), Hawai'i Public Utilities Commission (HPUC), State Fire Council (SFC), Office of Planning Sustainable Development (OPSD), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Law Enforcement (DLE), Hawai'i Department of Transportation (DOT), and Commission on Water Resource Management (CWRM) to prepare a preliminary action plan for addressing Phase Two Findings and Recommendations pertaining to their areas of responsibility.

*Findings and Recommendations Addressed:*

- Finding 1 (page 303)- Recommendations 1 and 2

**Recommendations for how to address Priority 1.**

Select a Priority 1 task owner from a state government organization.

This priority could benefit from leadership from an individual or organization having the most knowledge of the wildfire system components addressed in Phase Two. In most states this would be the state fire marshal. However, because there is no currently appointed fire marshal in Hawaii, an alternative should be identified. Consider contracting with the non-profit Hawaii Wildfire Management Organization (HWMO) to share a leadership role with a leader from a state organization having current wildfire responsibilities. HWMO has the knowledge and experience in wildfire prevention,

preparedness, multi-partner coordination, and project management, and was also an excellent resource to FSRI throughout Phase One and Phase Two. They also work closely with all county, state and federal fire agencies, public utilities, community groups, the National Weather Service (NWS), and code and standards organizations such as the National Fire Protection Association (NFPA), International Code Council (ICC), and Underwriter's Laboratories Standards and Engagement (ULSE).

The leader of this priority could be responsible for:

Scheduling and facilitating meetings with the group of state organizations listed, sharing work product examples, preparing a timeline, using a project planning tool to document progress toward completion, and providing status reports to Priority 1 owner while ensuring all tasks completed as per the timeline.

This priority sets the table for the subsequent priorities. Each state organization leading the development of their action plan should avoid working in isolation or reinventing existing processes, as this can lead to inefficiencies and fragmentation. Collaboration with other agencies and stakeholders is encouraged and essential to avoid duplication, competition, and potential harm. Achieving more cohesive and effective outcomes requires building on existing data, programs and knowledge.

**Priority 2. State Fire Marshal.** Department of Labor and Industrial Relations (DLIR) to recruit and hire State Fire Marshal (SFM). SFM (or interim leader) to work closely with SFC to prepare an action plan for addressing Phase Two Findings and Recommendations related to codes, standards, zoning, vegetation management, wildfire data collection, mutual aid response, and firefighter training and operations standards (including private contractors).

*Findings and Recommendations Addressed:*

- Finding 3 (page 303) - Recommendations 1 and 2
- Finding 9 (page 304) - Recommendations 1, 2, 3 and 4
- Note: Priority 2 is already in progress from the last legislative session. FSRI provided input to the job description to support the effort, however the status of the hiring process is unknown.

## **Recommendations for how to address Priority 2.**

This is a two-part project where both are completed concurrently. One project is to hire a SFM, and the second is to identify an interim SFM that can work on the tasks that will ultimately be managed by the SFM once hired.

First task is to select a Priority 2 owner. This could be the leader of the organization most responsible for managing the recruitment and hiring of the SFM, which may come from DLIR, Department of Human Resources Development (DHRD), State Personnel Office, and/or member of the SFC. Each one of these organizations has been, or will likely be, involved in the hiring process.

The organizations listed above should finalize the class specification and associated job duties to ensure it includes, but not be limited to, wildfire (including wildland urban interface - WUI) prevention, preparedness, response, and recovery, as well as multi-agency and multi-sector coordination and strategy.

The recruitment and hiring of a SFM should include a project plan with tasks, task owners, completion timelines, and other components of a well-developed work plan that ensures efficiency and accountability.

The second part of this project includes identifying an interim leader to address the system components of Phase Two that will ultimately be the responsibility of the SFM. This is another area where HWMO may be able to assist as a contractor. As mentioned in Priority 1, they have knowledge, experience and the professional network to develop a project plan to address each of the items listed in Priority 2, and several of the subsequent priorities where the SFM is listed.

**Priority 3. Wildfire Education Programming.** Provide educational programming for the diversity of audiences across the state regarding wildfire preparedness. Programming to include mitigation best practices, defensible space and vegetation management, fire weather, and fire behavior. Develop and implement a plan for ongoing financial support for this programming.

### *Findings and Recommendations Addressed:*

- Finding 11 (page 305) - Recommendation 1
- Finding 13 (page 305) - Recommendation 1
- Finding 18 (page 306) - Recommendation 4

- Finding 37 (page 309) - Recommendation 1
- Finding 39 (page 309) - Recommendation 1
- Finding 75 (page 316) - Recommendations 2 and 3

### **Recommendations for how to address Priority 3.**

This is another two-part project where both tasks are completed concurrently. One task is to identify a state government organization that will be responsible for ensuring wildfire-related educational programming is prioritized and supported at the state level (accountability). The second is to fund and support the ongoing work to be adequately carried out (implementation).

First task is to select a Priority 3 owner from a state government organization.

Ensuring ongoing state-level accountability and support for this priority may eventually fall under the SFM's purview, or potentially DLNR-DOFAW's, should their responsibilities expand beyond conservation areas. In the meantime, the interim SFM, as identified in Priority 2, could take on this responsibility.

Second task is to ensure existing programming is supported and implemented. Currently, HWMO serves as the lead coordinating entity for wildfire outreach campaigns, educational resources, and training programs, collaborating with DLNR-DOFAW, county fire departments, emergency management agencies, and communities to deliver statewide, multi-sector wildfire preparedness and mitigation programs. However, with minimal to no state funding at present, securing financial support will be crucial for the sustained implementation of this priority.

**Priority 4. Communication Systems.** HI-EMA and SFM to assess the resiliency and functionality of communication systems and the All-Hazard Outdoor Warning Siren System (OWSS), and establish redundant public alerting and warning processes, including best practice messaging guidance.

#### *Findings and Recommendations Addressed:*

- Finding 36 (page 309) - Recommendation 1
- Finding 37 (page 309) - Recommendation 1
- Finding 75 (page 316) - Recommendations 1 and 2

## **Recommendations for how to address Priority 4.**

Select a Priority 4 task owner from a state government organization.

Due to HI-EMA having responsibility for the OWSS they may be best positioned to own and lead this priority. Other organizations that can assist include county emergency management agencies, DLNR-DOFAW (could provide wildfire input on behalf of SFM until one is selected, or have interim SFM from Priority 2 engage), NWS, telecommunications providers, and Hawaiian Electric (may be able to help with addressing resilient electrical power options).

**Priority 5. Utilities Risk Reduction and Planning.** HPUC and SFM to work with public utilities (electric and water) to identify immediate improvements to vegetation management programs to protect infrastructure from wildfire and enhance resiliency, and to provide guidelines for supporting incident management and operations.

### *Findings and Recommendations Addressed:*

- Finding 29 (page 308) - Recommendation 1
- Finding 31 (page 308)- Recommendation 1
- Finding 56 (page 311) - Recommendation 1

## **Recommendations for how to address Priority 5.**

Select a Priority 5 owner from a state government organization.

Since HPUC falls under the Department of Commerce and Consumer Affairs (DCCA), DCCA may be best positioned to own and lead this priority with assistance from the interim SFM identified in Priority 2. DLNR-DOFAW, DLNR-Land Division, land owners, Hawaiian Electric, and CWRM can also contribute to this effort.

To address guidelines for incident management and operations, the interim SFM mentioned in Priority 2 can work closely with the SFC to develop expectations/guidelines for cooperators supporting incident commanders.

**Priority 6. Fire Weather.** DLNR-DOFAW, SFC, and SFM to support National Weather Service (NWS) in improving weather forecasting and historical record keeping by ensuring remote automatic weather stations (RAWS) are positioned in high wildfire danger areas statewide. Also engage other stakeholders, such as Hawaiian Electric Co.

and University of Hawaii, who are currently installing weather stations that may provide additional fire weather information.

*Findings and Recommendations Addressed:*

- Finding 5 (page 303) - Recommendation 2
- Finding 6 (page 303) - Recommendation 1
  - Note: this can be expanded to installing more RAWS in West Maui and other wildfire prone areas since two (2) RAWS have been positioned in Lahaina.
- Finding 7 (page 303) - Recommendation 1
- Finding 8 (page 304) - Recommendation 1

**Recommendations for how to address Priority 6.**

Select a Priority 6 task owner from a state government organization.

DLNR-DOFAW is the only state organization with wildland firefighters possessing national qualifications and having extensive knowledge of weather and other factors influencing wildland fire behavior. DLNR-DOFAW could work closely with the interim SFM mentioned in Priority 2 and the SFC to complete this priority.

**Priority 7. Evacuation.** HI-EMA, DLE, DOT, and OPSD to coordinate with county law enforcement, fire, emergency management, and planning agencies in preparing a standardized format for documenting and executing evacuation plans for high wildfire risk areas.

*Findings and Recommendations Addressed:*

- Finding 16 (page 306) - Recommendation 1
- Finding 17 (page 306) - Recommendation 1
- Finding 18 (page 306) - Recommendations 1 and 3
- Finding 19 (page 306) - Recommendations 1 and 2
- Finding 71 (page 314) - Recommendations 1 and 2
- Finding 72 (page 315) - Recommendations 1, 2, 3, 4, 5, and 6
- Finding 76 (page 316) - Recommendations 1, 2, and 3

**Recommendations for how to address Priority 7.**

Select a Priority 7 task owner from a state government organization.

DLE is the state law enforcement agency responsible for collaborating with federal, state, county, and private sector stakeholders. In addition to working closely with the organizations identified in the priority, DLE should also work with HWMO to learn where the wildfire risk areas are located throughout the state, where these risks are expanding to, and which communities currently have neighborhood evacuation plans and safe refuge locations already identified and/or developed.

**Priority 8. Codes and Standards.** SFM, HBCC, and SFC collaboratively evaluate and enhance the review and adoption processes for codes and standards, ensuring they effectively address wildfire risks, particularly in the wildland-urban interface (WUI). Work to align and coordinate codes to reduce fire risks to the built environment. Jointly ensure organizational structures are prioritized and appropriately staffed to efficiently adopt and implement updated codes that reflect the state's wildfire threat, ensuring a unified approach to wildfire resilience.

*Findings and Recommendations Addressed:*

- Finding 14 (page 305) - Recommendation 3
- Finding 15 (page 306) - Recommendation 1
- Finding 77 (page 316) - Recommendation 2
- Finding 78 (page 316) - Recommendation 1
- Finding 80 (page 316) - Recommendation 2

**Recommendations for how to address Priority 8.**

Select a Priority 8 task owner from a state government organization.

Without a SFM, and if the HBCC does not have full time administrative staff, a member of the Department of Accounting and General Services (DAGS) could be designated as the owner. DAGS and the interim SFM identified in Priority 2 could work closely with HBCC, SFC, ICC, NFPA and other code and standards stakeholders to complete this priority.

**Priority 9. Wildfire Response Preparedness.** SFM, SFC, HIEMA, and DLNR-DOFAW to improve the coordination of wildfire preparedness and response of emergency responders across all agencies and private contractors to ensure the effective and efficient use of shared resources and to provide expectations for incident management organization.



*Findings and Recommendations Addressed:*

- Finding 40 (page 309) - Recommendation 2
- Finding 41 (page 310) - Recommendation 1
- Finding 42 (page 310) - Recommendation 1
- Finding 43 (page 310) - Recommendation 1

**Recommendations for how to address Priority 9.**

Select a Priority 9 task owner from a state government organization.

DLNR-DOFAW may be best positioned to be the owner and leader of this priority due to their specialized wildland firefighting training and operational expertise. The other organizations identified in the priority, including the interim SFM identified in Priority 2, can assist by expanding response to the WUI and other types of emergencies.

**Priority 10. Vegetation and Land Management.** Identify the state agency responsible for vegetation management of non-conservation areas and establish a framework for land owners to follow for responsible land management. Appropriate agencies to lead this effort include those with experiences in natural resource and land management, zoning, education, and enforcement.

*Findings and Recommendations Addressed:*

- Finding 9 (page 304) - Recommendations 1, 2, 3, 4, and 5
- Finding 10 (page 305) - Recommendations 1, 2 and 3
- Finding 11 (page 305) - Recommendation 1
- Finding 12 (page 305) - Recommendations 1 and 2
- Finding 13 (page 305) - Recommendations 1, 2, and 3
- Finding 78 (page 316) - Recommendation 1

**Recommendations for how to address Priority 10.**

Select a Priority 10 task owner from a state government organization.

Currently, there is no state organization tasked with developing or enforcing vegetation management guidelines, directives, or laws, and there is no framework governing responsible land management or related codes and policies that ensure public safety is prioritized in such land management practices. In other states, this is often the responsibility of the SFM.

For this priority, DLNR-DOFAW may have the most state agency experience in the design and implementation of vegetative fuels management for fire risk reduction, even though its efforts are restricted to conservation areas.

HWMO currently provides training, best practice information, and mitigation planning support for vegetation management. They have also developed statewide vegetation management maps and reports, and collaborated with communities, land stewards, and agencies on small defensible space and fuel break projects.

Perhaps the owner of this priority is DLNR-DOFAW with assistance from the interim SFM identified within Priority 2. Other relevant partners, such as HWMO (described above) and UHERO (UH Economic Research Organization), who has initiated a study about the economics related to this issue, could also be engaged for an informed and collaborative approach to developing the action plan and framework.